

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) 10-05-2007		2. REPORT TYPE FINAL		3. DATES COVERED (From - To)	
4. TITLE AND SUBTITLE "1,000-Ship Navy": New Concept or Current SOUTHCOM Maritime SOP?				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) LCDR Kevin D. Long, USN Paper Advisor (if Any): Prof David Carrington				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Joint Military Operations Department Naval War College 686 Cushing Road Newport, RI 02841-1207				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT Distribution Statement A: Approved for public release; Distribution is unlimited.					
13. SUPPLEMENTARY NOTES A paper submitted to the faculty of the NWC in partial satisfaction of the requirements of the JMO Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.					
14. ABSTRACT The "1,000-ship Navy" concept is currently the new catch phrase in the maritime arena and is gaining momentum along with popularity. However, the theory, blueprint, and model may already exist in U.S. Southern Command's (SOUTHCOM) Standard Operating Procedures (SOPs). Due to current force management guidance, SOUTHCOM has few, if any, assigned, apportioned, or allocated assets. This lack of assigned U.S. forces and transiting deployed assets has set the stage for SOUTHCOM to call upon the resources, militaries, and peoples of the countries located or represented in their area of responsibility. SOUTHCOM has been promoting and building a "1,000-ship Navy" state of mind in the Caribbean and South American region for decades. Currently, SOUTHCOM is a model emulating the "1,000-ship Navy" through the "Enduring Friendship" and "Global Fleet Station" maritime security initiatives. These programs directly support interest in global maritime partnerships, a foundation and enabler for the "1,000-ship Navy" concept.					
15. SUBJECT TERMS 1,000-Ship Navy - Maritime Domain Awareness - Enduring Friendship - Global Fleet Station					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES 19	19a. NAME OF RESPONSIBLE PERSON Chairman, JMO Dept
a. REPORT UNCLASSIFIED	b. ABSTRACT UNCLASSIFIED	c. THIS PAGE UNCLASSIFIED			19b. TELEPHONE NUMBER (include area code) 401-841-3556

NAVAL WAR COLLEGE
Newport, R.I.



"1,000-SHIP NAVY": NEW CONCEPT OR CURRENT SOUTHCOM MARITIME
SOP?

by

Kevin D. Long
Lieutenant Commander, U.S. Navy

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: //s//

10 May 2007

Professor David Carrington
Faculty Advisor, JMO Department

Abstract

The “1,000-ship Navy” concept is currently the new catch phrase in the maritime arena and is gaining momentum along with popularity. However, the theory, blueprint, and model may already exist in U.S. Southern Command’s (SOUTHCOM) Standard Operating Procedures (SOPs). Due to current force management guidance, SOUTHCOM has few, if any, assigned, apportioned, or allocated assets. The lack of assigned U.S. forces and transiting deployed assets has set the stage for SOUTHCOM to call upon the resources, militaries, and peoples of the countries located or represented in their area of responsibility. SOUTHCOM has been promoting and building a “1,000-ship Navy” state of mind in the Caribbean and South American region for decades. Currently, SOUTHCOM is a model emulating the “1,000-ship Navy” through the “Enduring Friendship” and “Global Fleet Station” maritime security initiatives. These programs directly support interest in global maritime partnerships, a foundation and enabler for the “1,000-ship Navy” concept.

Table of Contents

Introduction	1
What is the 1,000-ship Navy	2
Maritime Domain Awareness	5
Enduring Friendship	7
Global Fleet Station	10
Recommendations	13
Conclusion	16
Bibliography	18

Although the challenges which we face in Iraq, Afghanistan, and elsewhere consume much of the energy, resources, and attention of our nation and our Committee, we ignore other parts of the world and other issue areas at our peril.¹

House Armed Services Committee Chairman Ike Skelton

Introduction

The “1,000-ship Navy”² concept is currently the new catch phrase in the maritime arena and is gaining momentum along with popularity. However, the theory, blueprint, and model may already exist in U.S. Southern Command’s (SOUTHCOM) Standard Operating Procedures (SOPs). The current, Department of Defense Global Force Management Guidance, FY 2005 and biennial Forces for Unified Commands Memorandum, leaves many Combatant Commanders with few, if any, assigned, apportioned, or allocated assets. For most Combatant Commanders the lack of assigned assets is not an issue. Numerous U.S. and Allied forces en-route to areas of current conflict will transit their areas of responsibility.

SOUTHCOM, because of its geographic location, is a Combatant Command in a unique position. SOUTHCOM is no different from most of the other Combatant Commands in the lack of assigned maritime associated forces. However, it differs from the other Combatant Commands in the fact that deployments to the current “hot spots” of Iraq and Afghanistan do not require U.S. Naval and associated forces to transit the SOUTHCOM area of responsibility. Unfortunately for SOUTHCOM, with U.S. current naval requirements in the Persian Gulf region, forces are required to arrive on-station in the most expeditious manner possible, and transiting via the SOUTHCOM area of

¹ House Armed Services Committee. *Testimony concerning Fiscal Year 2008 National Defense Authorization Budget Request*. 21 March 2007, <http://www.cipcol.org/archives/000423.htm>, (accessed 05 April 2007).

² More formally known as the Global Maritime Partnership Initiative, in recognition that not all participating nation have established navies. Also, sometimes referred to as the Global Maritime Network.

responsibility is not the shortest route. SOUTHCOM consistently makes a good case for having assets train and conduct friendship-building exercises in their area of responsibility. However, these forces cannot be relied upon on a regular basis.

The lack of assigned U.S. forces and transiting deployed assets has set the stage for SOUTHCOM to call upon the resources, militaries, and peoples of the countries located or represented in their area of responsibility. The thesis of this paper is that SOUTHCOM has been promoting and building a “1,000-ship Navy” state of mind in the Caribbean and South American region for decades. SOUTHCOM has accomplished this in the past, through a robust Maritime Theater Security Cooperation Plan, innovative maritime exercises, and training initiatives. Currently, SOUTHCOM is a model emulating the “1,000-ship Navy” through the “Enduring Friendship” maritime security initiative. Additionally, it is no surprise that the SOUTHCOM arena has been picked to prove the viability of the CNO’s Global Fleet Station pilot program. This program directly supports interest in global maritime partnerships, a foundation and enabler for the “1,000-ship Navy” concept.

No nation can do everything, but all nations can do something. Maritime security starts with every nation’s capacity to contribute and expands outward from there.³

Admiral Mike Mullen

What is the 1,000-ship Navy?

The central basis for the “1,000-ship Navy” concept is the reality that the number of threats, complex contingencies, and broader maritime missions for the U.S. Navy increase as each day goes by. In order to meet all these challenges it would take at least 1,000 deployed ships to successfully guard the maritime commons, which is a situation

³ U.S. Navy. Office of the Chief of Naval Operations, “Quotes from the CNO”, <http://www.navy.mil/navydata/leadership/quotes.asp?q=11&c=2>, (accessed 15 April 2007).

that neither the United States nor any other country can meet on its own. The goal is to build a global network made up of voluntary navies, coast guards, and non-military companies of all capabilities to form the “1,000-ship Navy.” Seventy-five percent of the earth’s surface is water. Currently there are approximately 46,000 commercial ships and 6,300 warships worldwide. Over 30 nations have navies capable of “global reach” and 160 nations have some navy, coast guard, or maritime police capability.⁴ It only makes sense to assume that some or most of these nations have an interest in either local or global maritime security issues. These nations would be the backbone for the “1,000-ship Navy.”

The “1,000-ship Navy” will make more sensors available to provide transparency to the maritime domain. This transparency, through information sharing, will increase maritime security through an improved overall comprehensive maritime domain awareness. The “1,000-ship Navy” is not a thousand gray hulls flying the American flag, but rather a voluntary global maritime network that ties together the communal capabilities of free nations to establish and maintain a dramatically increased level of international security in the maritime domain. The U.S. Navy is in a unique position to facilitate voluntary enlistment of nations as members in this global partnership, to include leaders in the shipping industry – but the U.S. Navy cannot do this without strong and sustained support from maritime nations and maritime interests across the globe.⁵

The “1,000-ship Navy” represents a paradigm shift for how countries conduct their maritime security operations through information cooperation and collaboration. Most people view this proposal as a monumental change in the current ways of thinking,

⁴ Michael G. Mullen, “The “1000 Ship Navy” Global Maritime Partnerships,” Powerpoint, 14 August 2006.

⁵ John G. Morgan, Jr., and Charles W. Martoglio, “The 1,000-Ship Navy Global Maritime Network,” *United States Naval Institute. Proceedings* Vol. 131, Iss. 11 (November 2005), 17.

and they would certainly be correct. However, more importantly for SOUTHCOM, the “1,000-ship Navy” is also an opportunity for countries without an established blue water navy⁶ or capable and operational coast guard to benefit from the idea of shared information and resources, for the betterment of all. Enlightened self-interest, low barriers to entry (especially technical), and respect for national sovereignty all underpin this notion. The “1,000-ship Navy” will have no leader and no task group commander. Using commonly agreeable standards of information-sharing, nations would participate or not participate as their interests dictate.⁷ A key factor which will affect the reality and execution of the “1,000-ship Navy” growing long lasting roots, will be convincing self-sufficient navies that it is truly in their best interest to join this effort. Conversely, for smaller nations with sovereignty issues, the “What’s in it for them?” approach will be a better method to use.

The overarching challenge of a “1,000-ship Navy” lies in solidifying relationships with other maritime nations and establishing common maritime interests. The “1,000-ship Navy” must, as the National Strategy for Maritime Security notes generally, “take full advantage of strengthened alliances and other international cooperative arrangement.”⁸ America historically has looked north, east, and west for major naval alliances and partnerships, partly due to a pre-September 2001 sense of homeland security. However, with the “1,000-ship Navy” concept recently shifting focus away from the classic Mahanian fleet-on-fleet engagement, a spotlight has been turned to the

⁶ In this context, “blue-water navy” is used to describe a maritime force capable of operating across the deep waters of open ocean to exercise sea control at wide ranges.

⁷ Bryan G. McGrath, “1,000-Ship Navy and Maritime Strategy,” *United States Naval Institute. Proceedings* Vol. 133, Iss. 1 (January 2007), 30.

⁸ U.S. President, The National Strategy for Maritime Security, (Washington, DC: White House, September 2005), 1.

south. With strong working relationships already in place, SOUTHCOM has been seen as an ideal theater to test the operational concepts and implementation of a “1,000-ship Navy”, due to decades of theater security cooperation.

America, in this new century, again faces new threats. Instead of massed armies, we face stateless networks; we face killers who hide in our own cities. We must confront deadly technologies. To inflict great harm on our century, America’s enemies need to be only right once. Our intelligence and law enforcement professionals in our government must be right every single time.⁹

President George W. Bush

Maritime Domain Awareness

In the operational realm of the “1,000-ship Navy” planners will consistently need to create and maintain what is known as Maritime Domain Awareness. The foundation to addressing today’s worldwide maritime threats is an effective understanding of all activities, events, and trends on the worlds’ oceans and seas. In a sense Maritime Domain Awareness operationalizes the “1,000-ship Navy.”

Achieving global Maritime Domain Awareness will be a constantly adapting challenge. The vastness of the oceans, the enormous span of the littorals, and the multitude of possible port areas add extensive complication to the task. The use of flags of convenience and lack of clearness into a vessels’ ownership, crew, and cargo creates additional challenges for Maritime Domain Awareness. Lloyd’s of London estimates that there are 89,000 ships in the world ranging from 100-ton coastal freighters to the 565,000-ton oil tanker *Jahre Viking*¹⁰, flying the flags of 150 nations and manned by over a million seafarers of virtually every nationality.¹¹ Maritime Domain Awareness requires

⁹ George W. Bush, The National Strategy for Maritime Security, (Washington, DC: White House, September 2005), 3.

¹⁰ Global Security, “Regional Maritime Security Initiative,” <http://www.globalsecurity.org/military/ops/rmsi.htm>, (accessed 19 April 2007).

¹¹ International Maritime Organization, “International Shipping and World Trade, Facts and figures,” http://www.imo.org/includes/blastDataOnly.asp/data_id%3D15659/InternationalShippingandWorldTrade-factsandfigures.pdf, (accessed 19 April 2007).

integrating all available intelligence and open-source data to establish and sustain visibility on these 89,000 ships and operators. It is profoundly dependent on information sharing, both nationally and internationally, and requires cooperation on a new level among the various elements of the public and private sectors.

The “1,000-ship Navy” will not only have to rely on the world’s military fleets, but even more so on its Coast Guards, border control assets, and civilian maritime organizations to institute a local and global Maritime Domain Awareness. The majority of the threats the “1,000-ship Navy” will deal with will be various criminal activities on vessels not flying one particular, or any, nation’s flag. As such, military forces may not be able to respond to or identify these threats, as they usually become almost impossible to distinguish from day to day general maritime activity. The Panama Canal is a critical maritime chokepoint in SOUTHCOM where the collaboration with the local maritime organizations is more productive than that of its military participation. Between 13,000 and 14,000 transoceanic vessels transit the Panama Canal each year, carrying approximately five percent of the world’s trade, according to the Panama Canal Authority.¹² The Panama Canal Authority is an autonomous organization with control over the major maritime choke point. The Authority can contribute immensely to the overall Maritime Domain Awareness to our south and internationally. The National Strategy for Maritime Security correctly captures this thought by saying, “Maritime security is best achieved by blending public and private maritime security activities on a global scale into a comprehensive, integrated effort that address all maritime threats.”¹³

¹² Panama Canal Authority, “This is the Canal,” <http://www.pancanal.com/eng/general/asi-es-el-canal.html>, (accessed 19 April 2007).

¹³ George W. Bush, The National Strategy for Maritime Security, (Washington, DC: White House, September 2005), 13.

Whenever and wherever the opportunity exists, we must develop, and sustain relationships that will help improve the capacity of our emerging and enduring partners' maritime forces, and help them achieve common desired effects.¹⁴

Admiral Mike Mullen

Enduring Friendship

SOUTHCOM has numerous pre-existing and ongoing programs, through their Theater Security Cooperation initiatives that embody the “1,000-ship Navy” concept. Just by their physical nature, these programs will help countries and nations external to the United States to build a higher level of Maritime Domain Awareness. Many countries in the SOUTHCOM area of responsibility have multiple issues that pull their focus, resources, and funds away from the maritime mission. This situation creates navies with meager financial resources, where the U.S. can be a source of funds, equipment, and training. One such ongoing SOUTHCOM partnership initiative is Enduring Friendship.

During the “West 2007, AFCEA/Naval Institute Conference,” Adm. Stavridis stated, “Enduring Friendship is a program...which will provide some of our partner nations in the Caribbean with the ability to monitor their coastlines using radars, investigate suspicious contacts at sea using high speed patrol boats, share information linked together using communications and demonstrate command and control of the forces that can go out and help them govern the territorial seas throughout the Caribbean.”¹⁵

The overarching Enduring Friendship purpose is to build up or create several key partner nations' maritime security capabilities, allowing them to properly police their

¹⁴ U.S. Navy. Office of the Chief of Naval Operations, “Quotes from the CNO”, <http://www.navy.mil/navydata/leadership/quotes.asp?q=11&c=2>, (accessed 20 April 2007).

¹⁵ Adm. James G. Stavridis, Commander U.S. Southern Command, interview by MC3 Tim Wightman prior to keynote address at the “West2007, AFCEA/Naval Institute Conference”, San Diego, CA, 9 February 2007.

territorial waters. The obvious outcome from this initiative is an overall contribution to Maritime Domain Awareness, and the “1,000-ship Navy.” One of the many positive side effects of Enduring Friendship is decreasing the demand on U.S. assets, making them available for other missions. Enduring Friendship will increase partner nations’ capabilities to exercise sovereignty over their territorial waters, and lay the foundation for them to participate in maritime information sharing operations in the Caribbean and Central America regions.

The first of three Enduring Friendship phases focuses on the Dominican Republic, Panama, Jamaica, and the Bahamas. These four countries were chosen for several reasons: first, their potential to conduct transit zone detection, monitoring, and interdiction due to their geographic locations with respect to commercial sea-lanes; second, their potential to control historic illicit trafficking lanes. Each partner nation will receive four, forty-three foot interceptor boats (w/3 X 350 hp diesel engines), equipped with up-to-date radios, GPS, FLIR, RADAR, and the Combined Enterprise Regional Information Exchange System (CENTRIXS). The Enduring Friendship interceptor boats



have a superior extended range thanks to a 300-gallon fuel capacity and a cruising speed of 50 MPH, with a max speed of 60 MPH.¹⁶ There is virtually nothing in the Caribbean that can outrun these boats in either speed or range. In addition to the interceptor boats each country receives trucks and trailers to move the boats, maintenance sustainment, and associated training for the operators. As a side note the training is currently conducted in Ft. Myers, Florida with nothing but positive results.

¹⁶ Dean Penovich, “Enduring Friendship,” SOUTHCOM Powerpoint, 5 March 2007.

Phase two will include Belize, Honduras, Guatemala, and Nicaragua for the same reason stated previously for phase one countries. The remainder of the Eastern Caribbean and the Regional Security Systems countries will complete the Enduring Friendship initiative in phase three.

There have been many initiatives, with an Enduring Friendship theme, which have given equipment, funds, and resources to a country or region. The hope was that the mere existence of these new assets could only help in the overall situation. However, the problem with many of these initiatives was that they were never technologically capable of effectively contributing, or were immediately outdated and obsolete. The reason for this deficiency was that older systems were usually the ones passed on, and not the latest in technology. Enduring Friendship is different in that the program comes with the latest in command, control, and communication technology called, CENTRIXS.

CENTRIXS is designed to be a global, interoperable, interconnected, inexpensive, and easy-to-use information sharing system.¹⁷ It is a data network for U.S. and partner nations to share up to classified operational and intelligence information. This system is currently widely used in the Central Command area of responsibility. In the Enduring Friendship application this system will vastly add to the Maritime Domain Awareness picture. At the completion of this initiative there will be a minimum of 32 interceptor boats in the Caribbean. These boats will be distributed over eight countries, all with the same system capable of speaking to each other. These countries will be able to build a comprehensive maritime information grid spanning the entire Caribbean with the use of shared voice, data, and video.

¹⁷ Joint Interoperability Test Command, "Combined Enterprise Regional Information Exchange System (CENTRIXS)," <http://jitc.fhu.disa.mil/washops/jtca/centrix.html> (accessed 20 April 2007).

CENTRIXS is also designed to satisfy the future requirement for day-to-day information sharing which will keep these assets technologically up to date and a longstanding viable contributing force. The vision of CENTRIXS is to one day form a single, common, global, multinational data sharing network which currently sounds like a “1,000-ship Navy” theme.

The Enduring Friendship interceptor boats by themselves are certainly a capable and reliable asset. However, with the use of the CENTRIX system these assets can provide valuable and timely information to a host of multinational partners. This initiative creates a higher level of Maritime Domain Awareness, and is exactly in keeping with the “1,000-ship Navy” theme both in number and in spirit. Enduring Friendship will help reduce U.S. operational tempo by the partner nations projecting improved maritime capacity and sovereignty over under-governed littoral regions.

Imagine a hub where all manner of Joint, Inter-Agency, International Organizations, navies, coast guards and non-governmental organizations could partner together as a force for good.¹⁸

Admiral Mike Mullen

Global Fleet Station

The Global Fleet Station is part of the Chief of Naval Operation’s vision for the future where navies, coast guards and civilian services join together to promote common interest as well as cross-training. Global Fleet Station is a proposal to use ships and riverine boats around the world to assist and promote good will with other nations’ maritime services.¹⁹ However, this is a concept that is very similar to one that began in

¹⁸ U.S. Navy. Navy Office of Information, Rhumb Lines, “Global Fleet Station (GFS)”, http://www.navyleague.org/councils/rhumb_lines.php, (accessed 17 April 2007).

¹⁹ Holly Boynton, U.S. Department of Defense Information, “COMUSNAVSO Plans Pilot for CNO’s Global Fleet Stations”, <http://proquest.umi.com> (accessed 26 February 2007).

1999 and concluded in June 2006 in the SOUTHCOM area of responsibility, just under a different title, the Caribbean Support Tender.

The ship chosen for the Caribbean Support Tender initiative was a fifty-seven year old buoy tender, the USCGC GENTIAN. GENTIAN was reactivated as the Caribbean Support Tender on 27 September 1999 and served in the SOUTHCOM area of responsibility almost seven years until decommissioning, 23 June 2006.²⁰ When GENTIAN reactivated, its new mission became international engagement, training, logistics and maintenance assistance seeking to foster cooperation and improve the operational capabilities in the Caribbean. The ship's ten-ton lift capacity and ability to carry 100,000 pounds of cargo allowed it to deliver goods and equipment across the Caribbean region. This made it an ideal platform for conducting training and support missions. Additionally, the ship supported multinational exercises and assisted in disaster relief operations. GENTIAN'S unique international crew consisted of 29 U.S. Coast Guard members and 16 representatives from maritime services of countries throughout the Caribbean region.²¹ The multinational crew fostered improved regional cooperation and teamwork while providing an opportunity for the exchange of professional information and practices. The Caribbean Support Tender provided support to more than 23 countries, made 155 country visits, trained over 5,500 maritime personnel, and delivered over 3.9 million dollars in parts and supplies.²² This



²⁰ USCGC GENTIAN (WIX 290) Caribbean Support Tender Decommissioning Ceremony Stock Photos Gallery, http://www.pbase.com/airlinerphotos/uscgcg_gentian, (accessed 23 April 2007).

²¹ Ibid.

²² Ibid.

ship's success in SOUTHCOM laid the foundation for the current Global Fleet Station initiative.

The decommissioning of the GENTIAN in June 2006 created a void where an invaluable multinational maritime asset once was. This void will be perfectly filled by the Global Fleet Station initiative. The Global Fleet Station initiative will establish a self-sustaining sea-base to conduct regional operations through tailored and adaptive packages, and launch a variety of engagements with partner nations within a regional area of interest. Each Global Fleet Station will host partners from other services, agencies, nations, and non-governmental organizations. This will include Coast Guard, Army Engineers, Marine Small Craft Companies, and Department of State teams, as well as riders from host nations and other regional nations.²³ With the Global Fleet Station initiative becoming a reality the Commander, United States Naval Forces Southern Command volunteered to implement the Global Fleet Station pilot program in the SOUTHCOM area of responsibility. This initiative was immediately identified to help fill the void created by the loss of the Caribbean Support Tender.

The ship picked for the Global Fleet Station pilot program was the HSV-2 SWIFT. HSV-2 SWIFT is an aluminum-hulled, wave-piercing catamaran capable of reaching speeds of almost 50 knots. However, SWIFT'S speed is not the major reason for choosing this vessel. SWIFT has a draft of only about 11 feet when fully loaded, making the ship



²³ U.S. Navy, Navy Office of Information, Rhumb Lines, "Global Fleet Station (GFS)", http://www.navyleague.org/councils/rhumb_lines.php, (accessed 17 April 2007).

ideal for missions in shallow coastal waters.²⁴ SWIFT also has a large cargo hold for goods and resources, a heavy lift crane, and helicopter capable flight deck.

During the upcoming SOUTHCOM deployment, SWIFT plans to conduct country engagements through port calls and training exercises with Belize, Dominican Republic, Jamaica, Honduras, Guatemala, Nicaragua, and Panama. During these engagements, several multi agency and multi national teams onboard SWIFT will address training in port security, professional development, medical readiness, outboard motor maintenance, and patrol craft operations. The Global Fleet Station initiative possesses the ability to pick up where Caribbean Support Tender left off, and will continue to foster existing SOUTHCOM regional relationships.

An important facilitator to this [oil] critical trade throughout the Americas is the Panama Canal, which sees almost 15,000 ships transit each year, of which two-thirds are going to or from one of our coasts in the U.S. The canal, in effect, is the economic heartbeat of the Americas.²⁵

Admiral James G. Stavridis

Recommendations

First, the reality of a comprehensive level of Maritime Domain Awareness through a “1,000-ship Navy” must incorporate the public and private shipping industry. The non-military shipping industry can provide sensors on a global level, notifying authorities if something out of the ordinary is observed. This mindset, when applied to the maritime domain, would capitalize on the large number of ships and people spread across the globe. This new way of thinking would incorporate the people who have the experience to know when something is wrong. This concept not only applies when ships are in port, but in every aspect of the maritime community from on-load to off-load of

²⁴ U.S. Navy, U.S. Fleet Forces Command Public Affairs, “HSV Swift Shows Its Stuff”, http://www.news.navy.mil/search/display.asp?story_id=11800, (accessed 25 April 2007).

²⁵ Armed Services Committees, *The Posture Statement of Admiral James G. Stavridis, United States Navy, Commander, United States Southern Command*, 110th Cong., 21-22 March 2007. 4.

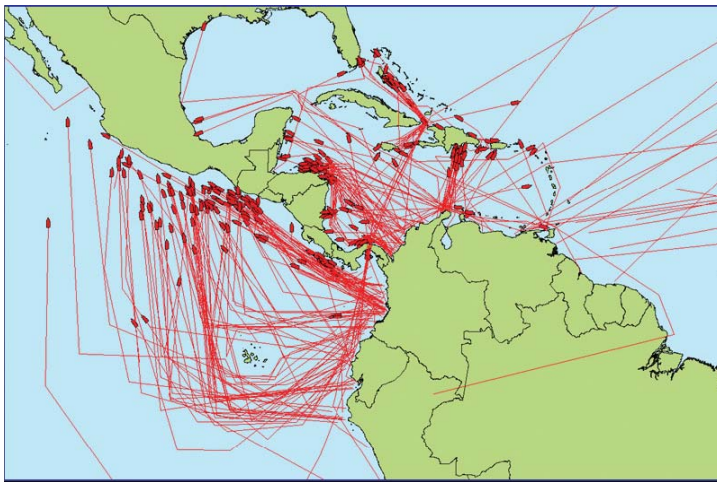
cargo. This approach would greatly increase the number of sensors actively patrolling the maritime realm, and would significantly complement the ongoing information gathering activities of nations around the world.

As stated previously in this paper, according to Lloyd's of London there are approximately 89,000 ships in the world, ranging from 100-ton coastal freighters to the 565,000-ton oil tanker Jahre Viking. These ships are manned by over a million seafarers of virtually every nationality. All of these ships and the people working on or around them have information readily available to the public that needs to be gathered.

Second, the need to have a global system in place similar to the Federal Aviation Administration (FAA), Identification Friend or Foe (IFF) system is critical. One similar system currently working on all ships above 300 tons is the Automatic Identification System (AIS). AIS is a VHF transponder that was originally designed to avoid merchant collisions and provide basic ship information to port facilities. Information output by each ship equipped with an AIS transponder includes the name of the ship, size of the vessel, speed and direction of travel, last point of departure, next port of call, composition of cargo, as well as other vessel and voyage related information.²⁶ This is an up to date, off the shelf technology that is currently producing a huge amount of untouched information beyond coastal waters. This information needs to be harnessed and organized into a global, common operating picture/system that is able to detect anomalies, and focus our resources on such anomalies. Unfortunately, this transponder is a VHF (around 20 mile range) based system, so it does not see the ranges of its' FAA counterpart.

²⁶ Milltech Marine, <http://www.milltechmarine.com/products.htm> (accessed 13 April 2007).

One key area that a system is needed incorporating current merchant navigational radar and AIS information from the public and private merchant fleet, is the Panama



Canal. As stated previously, 13,000 to 14,000 merchant ships per year transit the canal. With some simple math, on average the canal will have 35 ships transit per day. A typical maritime radar on average can

be effective 30-50 miles. Therefore, on any given day, SOUTHCOM could theoretically have around 3,100 miles of merchant radar coverage in the Eastern Pacific and Western Caribbean. Perhaps even a more compelling reason for implementing a merchant information gathering system is the physical location of the Panama Canal. The east-west sea-lanes that lead to and from the canal cut directly through the majority of the north-south suspect and illicit merchant activity sea-lanes (depicted in red on the chart above). SOUTHCOM needs a system that is able to collect, organize, and display a common operating picture depicting the information that each of these merchants is displaying on their navigational radars. The use of this information would greatly enhance resource allocation and utilization prosecuting targets of interest, vice using our resources for raw data collection and deterrence in a sea of unknown contacts.

Implementing a system such as this will obviously have some cost associated with it. This is where the “What’s in it for me?” question comes into play. My third recommendation is AIS equipment should be provided at no cost with the understanding

that ships using this equipment would be willing participants in building the common operating picture. Private and public shipping companies need to realize the collective efforts of all will only facilitate overall maritime security. In the long run, companies can expect that if their maritime activities are an open book, they will likely not be required to spend time with inspection operations, and should receive breaks on AIS equipment costs. One company that is leading the way for the future is Maersk Line. Maersk Line, a Danish concern, which with more than 500 ships and 1,400,000 containers is one of the world's largest shipping companies, has held talks with the U.S. Navy on how it could participate.²⁷ This mindset among major shipping lines is the future for an improved Maritime Domain Awareness.

The fourth and final recommendation consists of capitalizing on the opportunity to extend the maritime security capabilities of our SOUTHCOM partners through the transfer of surplus legacy platforms of the United States Coast Guard. These transfers would be conducted through the Excess Defense Articles program. These legacy platforms are ideal for the littoral waters of SOUTHCOM and are already familiar to many of our partner nations to the south. In addition to benefiting the receiving nation, transferring these assets to nations within the SOUTHCOM area of responsibility will help to build the maritime security capabilities of key nations close to U.S. borders and coastlines and strengthen our own homeland security.

Conclusion

A comprehensive level of Maritime Domain Awareness brought about from the reality of a "1,000-ship Navy" just makes sense. However, what does not make sense is

²⁷ Christopher P. Cavas, "The Thousand-Ship Navy," *Armed Forces Journal*, (December 2006), <http://www.armedforcesjournal.com/2006/12/2336959> (accessed 5 April 2007).

“reinventing the maritime wheel” to bring this concept to fruition. SOUTHCOM operations and initiatives are an excellent example of creating, fostering, and sustaining a maritime environment policed by a coalition of willing participants. SOUTHCOM has called upon the resources, militaries, and peoples of the countries located or represented in their area of responsibility out of necessity. They have called upon these countries to participate in a collaborative effort for the betterment of all. SOUTHCOM has shown that the results obtained from the collaboration of many far exceed the most concentrated efforts of one.

As we forge ahead in increasing Maritime Domain Awareness, we need to learn from and emulate the many successes SOUTHCOM has had with partner nations. We need to help fledgling and dysfunctional maritime forces build the capability to police their own sovereign territories. Additionally, these naval forces need to be equipped with the technology to participate and add to the maritime common operating picture.

We need to convince all private and public maritime related industries that participation in these initiatives is in their best interests from a time, money, and security aspect. We need to capitalize on existing information and off-the-shelf technology to keep entry-level cost down, thereby making participation accessible to all willing assets. In the future, we need to prove to all maritime assets that the days of hiding on the open seas are over. The future mindset should be that it is truly better to be recognized and identified, than to attempt to conceal your location; that not being an active participant in building the maritime common operating picture labels you as a suspect vessel that has a reason for non-participation. Some may construe this as harassment but it is unquestionably something else, it's maritime security.

Bibliography

Boynton, Holly, U.S. Department of Defense Information. "COMUSNAVSO Plans Pilot for CNO's Global Fleet Stations", <http://proquest.umi.com> (accessed 26 February 2007).

Cavas, Christopher P. "The Thousand-Ship Navy." *Armed Forces Journal*, (December 2006), <http://www.armedforcesjournal.com/2006/12/2336959> (accessed 5 April 2007).

Global Security. "Regional Maritime Security Initiative." <http://www.globalsecurity.org/military/ops/rmsi.htm> (accessed 19 April 2007).

International Maritime Organization. "International Shipping and World Trade, Facts and figures." <http://www.imo.org/includes/blastDataOnly.asp/data-id%3D15659/InternationalShippingandWorldTrade-factsandfigures.pdf> (accessed 19 April 2007).

Joint Interoperability Test Command. "Combined Enterprise Regional Information Exchange System (CENTRIXS)." <http://jitc.fhu.disa.mil/washops/jtca/centrix.html> (accessed 20 April 2007).

McGrath, Bryan G., "1,000-Ship Navy and Maritime Strategy." *United States Naval Institute. Proceedings*. Vol. 133, Iss. 1 (January 2007).

Milltech Marine, <http://www.milltechmarine.com/products.htm> (accessed 13 April 2007).

Miraglia, Alessandra. "Notes from the Southern Command's House testimony." 21 March 2007. <http://www.cipcol.org/archives/000423.htm> (accessed 05 April 2007).

Morgan, Jr., John G., and Charles W. Martoglio. "The 1,000-Ship Navy: Global Maritime Network." *United States Naval Institute. Proceedings*. Vol. 131, Iss. 11 (November 2005): 14-17.

Mullen, Michael G. "The "1000 Ship Navy" Global Maritime Partnerships." Powerpoint briefing to POTUS, 14 August 2006.

Panama Canal Authority. "This is the Canal." <http://www.pancanal.com/eng/general/asi-es-el-canal.html> (accessed 19 April 2007).

Penovich, Dean. "Enduring Friendship." SOUTHCOM J5 Powerpoint, 5 March 2007.

Stavridis, James G., interview by MC3 Tim Wightman prior to keynote address at the "West2007, AFCEA/Naval Institute Conference", San Diego, CA, 9 February 2007 .

USCGC GENTIAN (WIX 290) Caribbean Support Tender Decommissioning Ceremony Stock Photos Gallery. http://www.pbase.com/airlinerphotos/uscg_gentian (accessed 23 April 2007).

U.S. Congress. Armed Services Committees. *The Posture Statement of Admiral James G. Stavridis, United States Navy, Commander, United States Southern Command*, 110th Cong., 21-22 March 2007.

U.S. Navy. Navy Office of Information. Rhumb Lines. “Global Fleet Station (GFS).” http://www.navyleague.org/councils/rhumb_lines.php (accessed 17 April 2007).

U.S. Navy. Office of the Chief of Naval Operations. “Quotes from the CNO”, <http://www.navy.mil/navydata/leadership/quotes.asp?q=11&c=2> (accessed 15 April 2007).

U.S. Navy. U.S. Fleet Forces Command Public Affairs. “HSV Swift Shows Its Stuff”, http://www.news.navy.mil/search/display.asp?story_id=11800 (accessed 25 April 2007).

U.S. President. The National Strategy for Maritime Security. Washington, DC: White House, September 2005.